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=> d his
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(FILE 'HOME' ENTERED AT 12:02:23 ON 19 JAN 2004)

FILE 'REGISTRY' ENTERED AT 12:02:31 ON 19 JAN 2004 STRUCTURE UPLOADED

L1 STRUC L2 0 S L1

L3 86 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 12:03:42 ON 19 JAN 2004

L4 23 S L3

=> d 11

L1 HAS NO ANSWERS

L1 STR

G1

G2 C, H, O, S, N

G3 H,O,S,N,Cl,Br,F,I,Me,CH2,CH,CF3,CN

G4 C,N

G5 O,S,N,X,CN

Structure attributes must be viewed using STN Express query preparation.

## => d 1-23 bib abs hitstr

L4 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:658121 CAPLUS

DN 137:201294

TI Preparation of pyrroloquinolines, pyridoquinolines, pyranoquinolines, and related tricyclic compounds as androgen receptor modulators

IN Zhi, Lin; Van Oeveren, Cornelis Arjan; Chen, Jyun-Hung; Higuchi, Robert I.

PA Ligand Pharmaceuticals Incorporated, USA

SO PCT Int. Appl., 132 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1 APPLICATION NO. DATE KIND DATE PATENT NO. 20020223 20020829 WO 2002-IB537 WO 2002066475 A2 PΙ 20030123 WO 2002066475 Α3 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20020222 US 2002-80926 A1 20021205 US 2002183346 EP 2002-702589 20020223 A2 20031126 EP 1363909 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI US 2001-271189P P 20010223 WO 2002-IB537 W 20020223

OS MARPAT 137:201294

GI

This app in

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Title nonsteroidal tricyclic compds. I-VIII [wherein R1 = H, halo, NO2, OR12, SO0-2R12, NR12R13, or (un) substituted (halo) alkyl or heteroalkyl; R2 = H, halo, Me, CF3, CHF2, CH2F, CF2Cl, CN, CF2OR12, CH2OR12, OR12, SO0-2R12, NR12R13, or (un)substituted (halo)alkyl, heteroalkyl, alkenyl, or alkynyl; R3-R8 = independently H, halo, OR12, NR12R13, S00-2R12, or (un) substituted (halo) alkyl, heteroalkyl, alkenyl, alkynyl, (hetero) aryl, or arylalkyl; or R3R5 or R5R7 = a bond; or C2R4R6 or C2R6R8 = (un)substituted carbocyclic or heterocyclic ring; R9 and R10 = independently H, halo, CN, OR12, NR12R13, Cm(R12)2mOR13, S00-2R12, NR12COR13, or (un) substituted (halo) alkyl, heteroalkyl, or arylalkyl; R11 = H, halo, CN, OR14, NR14R15, SO0-2R14, CH2R14, COR14, CO2R14, CONR13R14, or (un) substituted (halo) alkyl or heteroalkyl; R12 and R13 = independently H or (un) substituted (halo) alkyl, heteroalkyl, alkenyl, alkynyl, or (hetero)aryl; R14 = H, COR15, CO2R15, CONR15R16, or (un)substituted (halo)alkyl, heteroalkyl, or (hetero)aryl; R15 and R16 = independently H or (un) substituted (halo) alkyl, or heteroalkyl; W = O or S; X = O, S, or NR14; Y = O, S, NR12, NOR12, or CR12R13; Z = O, S, or NR12; n = 0-2; m = 0.00-2; or pharmaceutically acceptable salts thereof] were prepd. as modulators of androgen receptors. For example, cyclization of 6-hydrazino-4-trifluoromethylquinolin-2(1H)-one with 3-pentanone afforded the cis-5,6-dihydro-7H-pyrrolo[3,2-f]quinolin-2(1H)-one. Oxidn. with DDQ in CH2Cl2 gave 6-ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-1H-pyrrolo[3,2-f]quinolin-2(1H)-one (IX). The latter exhibited 76% androgen receptor agonist efficacy with a potency (EC50) of 7.6 nM relative to dihydrotestosterone in co-transfection assays using CV-1 cells and displayed androgen receptor binding activity (IC50) of 1.7 nM. Pharmaceutical compns. and formulations of IX are also disclosed. I-VIII are useful for the treatment of acne, male-pattern baldness, impotence, sexual dysfunction, wasting disease, hirsutism, hypogonadism, prostatic hyperplasia, osteoporosis, cancer cachexia, and hormone-dependent cancers Pharmaceutical compns. and formulations of IX are also (no data). disclosed.

152105ed. 453592-19-3P 453592-20-6P 453592-22-8P 453592-30-8P 453592-41-1P 453592-46-6P 453592-47-7P 453592-52-4P 453592-53-5P 453592-54-6P 453592-55-7P 453592-56-8P 453592-57-9P 453592-60-4P 453592-71-7P 453592-72-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (androgen receptor modulator; prepn. of pyrroloquinolines, pyridoquinolines, pyranoquinolines, and related tricyclic compds. as androgen receptor modulators)

453592-19-3 CAPLUS
7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-9-(trifluoromethyl)(9CI) (CA INDEX NAME)

RN

CN

RN 453592-20-6 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-1-(1-methylethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453592-22-8 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1-(4-methoxyphenyl)-2-methyl9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453592-30-8 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-1,2-dimethyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$F_3C$$
 $Me$ 
 $NH$ 
 $NH$ 

RN 453592-41-1 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-1,2,3,6-tetrahydro-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-46-6 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-1-[3-(trifluoromethyl)phenyl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-47-7 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-(4-fluorophenyl)-1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-52-4 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-ethyl-1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

 $F_3C-CH_2$ 

RN 453592-53-5 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-ethyl-1,2,3,6-tetrahydro-2-propyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

F3C-CH2

RN 453592-54-6 CAPLUS

CN 1H-Pyrrolo[3,2-f]quinoline-1-propanoic acid, 2,3,6,7-tetrahydro-2-methyl-7-oxo-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)

RN 453592-55-7 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-1-methyl- (9CI) (CA INDEX NAME)

RN 453592-56-8 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-1,2,3,6-tetrahydro-1-methyl-3-(2,2,2-trifluoroethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-57-9 CAPLUS

7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1,2-dimethyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

 $F_3C-CH_2$ 

CN

RN 453592-60-4 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

F3C-CH2

CN

RN 453592-71-7 CAPLUS

7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-1-(hydroxymethyl)-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

F3C-CH2

RN 453592-72-8 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-(1-hydroxyethyl)-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

F3C-CH2

IT 453592-21-7P 453592-23-9P 453592-42-2P 453592-43-3P 453592-44-4P 453592-45-5P

453592-48-8P 453592-49-9P 453592-50-2P

453592-51-3P 453592-58-0P 453592-59-1P 453592-61-5P 453592-62-6P 453592-67-1P 453592-68-2P 453592-69-3P 453592-73-9P 453592-74-0P 453592-75-1P 453592-76-2P 453592-77-3P 453592-78-4P 453592-79-5P 453592-80-8P 453592-82-0P 453592-83-1P 453592-84-2P 453593-25-4P 453593-26-5P 453593-30-1P 453593-31-2P 453593-32-3P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (androgen receptor modulator; prepn. of pyrroloquinolines, pyridoquinolines, pyranoquinolines, and related tricyclic compds. as androgen receptor modulators) 453592-21-7 CAPLUS 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-1-(2-propenyl)-9-(trifluoromethyl) - (9CI) (CA INDEX NAME)

RN

CN

RN 453592-23-9 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-9-(trifluoromethyl)1-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 453592-42-2 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-butyl-1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-43-3 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-2-methyl-1-(4nitrophenyl)-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-44-4 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-[4-(dimethylamino)phenyl]-1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-45-5 CAPLUS

7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-1-(4-methoxyphenyl)-2methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-48-8 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-1-phenyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

F<sub>3</sub>C-CH<sub>2</sub>

RN 453592-49-9 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-1-(4-methoxyphenyl)-2-methyl-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-50-2 CAPLUS

CN

-7H-Byrrolo[3,2-f]quinolin-7-one, 3-(2,2-dimethoxyethyl)-1,2,3,6-tetrahydro-1-(4-methoxyphenyl)-2-methyl-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-51-3 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-2-methyl-1-(1-methylethyl)-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 453592-58-0 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-1-methyl-3-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

F<sub>3</sub>C-CH<sub>2</sub>

RN 453592-59-1 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

$$F_3C$$
 $NH$ 
 $F_3C-CH_2$ 

RN 453592-61-5 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-ethyl-3,6-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

 ${\tt F_3C-CH_2}$ 

RN 453592-62-6 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-ethyl-3,6-dihydro-2-propyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

 $F_3C-CH_2$ 

RN 453592-67-1 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-1-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

 $F_3C-CH_2$ 

RN 453592-68-2 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-(4-fluorophenyl)-3,6-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

F3C-CH2

RN 453592-69-3 CAPLUS

CN 3H-Pyrrolo[3,2-f]quinoline-1-propanoic acid, 6,7-dihydro-2-methyl-7-oxo-3-

(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)

EtO-C-CH<sub>2</sub>-CH<sub>2</sub>

Me
$$NH$$
 $F_3C$ -CH<sub>2</sub>

RN 453592-73-9 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-acetyl-3,6-dihydro-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453592-74-0 CAPLUS

CN 3H-Pyrrolo[3,2-f]quinoline-1-carboxaldehyde, 6,7-dihydro-2-methyl-7-oxo-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Me CHO NH
$$F_3C-CH_2$$

RN 453592-75-1 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-[(acetyloxy)methyl]-2-ethyl-3,6-dihydro-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453592-76-2 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-1-methanol, 7-(acetyloxy)-2-ethyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453592-77-3 CAPLUS

 $7 \\ H-Pyrrolo[3,2-f] \\ quinolin-7-one, 2-ethyl-3,6-dihydro-3-(2,2,2,2-dihydro-3-(2,2,2,2,2-dihydro-3-(2,2,2,2,2-dihydro-3-(2,2,2,2,2-dihydro-3-(2,2,2,2,2-dihydro-3-(2,2,2,2,2-dihydro-3-(2,2,2,2,2-dihydro-3-(2,2,2,2,2-dihydro-3-(2,2,2,2,2-dihydro-3-(2,2,$ CNtrifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

F3C-CH2

F3C-CH2

453592-78-4 CAPLUS RN

7H-Pyrrolo[3,2-f]quinolin-7-one, 1-(ethoxymethyl)-2-ethyl-3,6-dihydro-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453592-79-5 CAPLUS

CN7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-(1-methoxyethyl)-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

F3C-CH2

RN

453592-80-8 CAPLUS 7H-Pyrrolo[2,3-f]quinolin-7-one, 1,6-dihydro-2-methyl-3-(2-propenyl)-9-CN (trifluoromethyl) - (9CI) (CA INDEX NAME)

 $H_2C = CH - CH_2$ 

RN 453592-82-0 CAPLUS

7H-Pyrrolo[2,3-f]quinolin-7-one, 2-ethyl-1,6-dihydro-3-methyl-9-CN(trifluoromethyl) - (9CI) (CA INDEX NAME)

RN 453592-83-1 CAPLUS

 $7 \\ H-Pyrrolo[2,3-f] \\ quinolin-7-one, 1,6-dihydro-2-methyl-9-(trifluoromethyl)-1. \\ The properties of the properties$ CN 3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 453592-84-2 CAPLUS

CN 7H-Pyrrolo[2,3-f]quinolin-7-one, 1,6-dihydro-3-(2-hydroxyethyl)-2-methyl-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

 $HO-CH_2-CH_2$ 

RN 453593-25-4 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-2-(hydroxymethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453593-26-5 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3-ethyl-1,2,3,6-tetrahydro-2-(hydroxymethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453593-30-1 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 453593-31-2 CAPLUS

CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxaldehyde, 6,7-dihydro-1-methyl-7-oxo-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

453593-32-3 .CAPLUS RN

7H-Pyrrolo[3,2-f]quinolin-7-one, 3-(2,2-difluoroethenyl)-3,6-dihydro-1,2-CN dimethyl-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Me Me NH 
$$_{\rm NH}$$

L4ANSWER 2 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

1999:455695 CAPLUS AN

DN 131:213835

ΤI Reactivities of 5-, 6-, and 7-(enamino)indoles in the synthesis of pyrroloquinolines

ΑU Yamashkin, S. A.; Trushkov, I. V.; Tomilin, O. B.; Terekhin, I. I.; Yurovskaya, M. A.

CS Mordovian State Pedagogical Institute, Sarinsk, 430007, Russia

SO Chemistry of Heterocyclic Compounds (New York) (Translation of Khimiya Geterotsiklicheskikh Soedinenii) (1999), Volume Date 1998, 34(9), 1050-1065

CODEN: CHCCAL; ISSN: 0009-3122

PB Consultants Bureau

 $\mathtt{DT}$ Journal

LΑ English GI

AB The concept of regioorientation is proposed for the annelation of the pyridine ring with the participation of 5-, 6-, and 7-aminoindoles (e.g. ,I). The conclusions based on the exptl. data are supported by semiempirical AM1, PM3, and MNDO quantum-chem. calcns.

IT 243669-00-3 243669-02-5 243669-04-7

243669-06-9

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(reactivities of 5-, 6-, and 7-(enamino)indoles in the synthesis of pyrroloquinolines)

243669-00-3 CAPLUS

RNCN7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1,2,8,9-tetramethyl- (9CI) (CA INDEX NAME)

RN 243669-02-5 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1,2,3,8,9-pentamethyl- (9CI) (CA INDEX NAME)

RN 243669-04-7 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2,8-dimethyl- (9CI) (CA INDEX NAME)

RN 243669-06-9 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2,8,9-trimethyl- (9CI) (CA INDEX NAME)

# RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:731923 CAPLUS

DN 130:13934

TI Synthesis of pyrrolo-, thienopyrrolo-, and benzothienopyrroloquinolines as well as of triazoloindole derivatives

AU El-Desoky, S. I.; Kandeel, E. M.; Abd El-Rahman, A. H.; Shmidt, R. R.

CS Chemistry Department, Faculty Science, Mansoura University, Mansoura, Egypt

Zeitschrift fuer Naturforschung, B: Chemical Sciences (1998), 53(10), 1216-1222

CODEN: ZNBSEN; ISSN: 0932-0776

PB Verlag der Zeitschrift fuer Naturforschung

DT Journal

SO

LA English

OS CASREACT 130:13934

AB pyrroloquinolines, thienopyrroloquinolines, benzothienopyrroloquinolines, and triazoloindoles were prepd. starting from 6-amino-2,3-diphenylindole.

IT 216073-29-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of pyrroloquinolines, thienopyrroloquinolines, benzothienopyrroloquinolines, and triazoloindoles)

RN 216073-29-9 CAPLUS

CN lH-Pyrrolo[2,3-f]quinoline, 7-chloro-8-(2-chloroethyl)-2,3-diphenyl- (9CI) (CA INDEX NAME)

#### RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN L4

1998:226505 CAPLUS AN

DN128:294622

Synthesis of duocarmycin SA by way of methyl 4-(methoxycarbonyl)oxy-3Hpyrrolo[3,2-f]quinoline-2-carboxylate as a tricyclic heteroaromatic intermediate

Ć,

Muratake, Hideaki; Tonegawa, Miyuki; Natsume, Mitsutaka AU

CS Research Foundation Itsuu Laboratory, Tokyo, 158, Japan

Chemical & Pharmaceutical Bulletin (1998), 46(3), 400-412 so

CODEN: CPBTAL; ISSN: 0009-2363 Pharmaceutical Society of Japan PR

DTJournal

English LΑ

CASREACT 128:294622 os

GI

$$\begin{array}{c|c} \text{OH} \\ \text{NCO}_2\text{Me} \\ \text{MeO}_2\text{C} \\ \text{N} \\ \text{OCO}_2\text{Me} \end{array} \quad \text{III}$$

AB The new synthetic path proposed that a fully arom. I would afford the dihydropyridine deriv. II (X=Y = CH=CH, Z = CH2; X = CH2, Y=Z = CH=CH) on partial redn. and by making use of the double bonds formed, a hydroxyl group could be introduced at the required position either in a racemic or in an asym. way to yield III. The Stille coupling product obtained from the bromopyrrole with the stannylpyridine represented a potential precursor. Both Sharpless asym. dihydroxylation (AD) and Jacobsen's asym. epoxidn. were applied to II (X=Y=CH=CH, Z=CH2; X=CH2, Y=Z=CH=CH). At the best, 81% ee was obsd. in the AD reaction of II (X=Y = CH=CH, Z = CH2) using 2,5-diphenyl-4,6-bis(9-0-dihydroquinyl)pyrimidine [(DHQ)2PYR], but the product possessed an unnatural abs. configuration. Formal syntheses of (.+-.)-duocarmycin SA, natural (+)-duocarmycin SA and unnatural (-)-duocarmycin SA were accomplished via a tricyclic heteroarom. compd. I. IT

206115-56-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of duocarmycin SA via the tricyclic heteroarom. intermediate Me 4-(methoxycarbonyl)oxy-3H-pyrrolo[3,2-f]quinoline-2-carboxylate)

RN 206115-56-2 CAPLUS CN

6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 7-cyano-4-(2,2-dimethyl-1-oxopropoxy)-3,7-dihydro-, dimethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & CN \\ \hline MeO-C & & & N \\ \hline HN & & & C-OMe \\ \hline t-Bu-C-O & & & \\ \hline & & & \\ \hline & & & \\ \hline \end{array}$$

IT 206115-76-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of duocarmycin SA via the tricyclic heteroarom. intermediate Me 4-(methoxycarbonyl)oxy-3H-pyrrolo[3,2-f]quinoline-2-carboxylate)

RN 206115-76-6 CAPLUS

6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 7-cyano-4-(2,2-dimethyl-CN 1-oxopropoxy)-3,7-dihydro-, 2-methyl 6-(phenylmethyl) ester (9CI) (CA

$$\begin{array}{c|c} & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

### RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4ANSWER 5 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

1997:698152 CAPLUS AN

DN 128:3621

ΤI Studies on amine oxide rearrangements: regioselective synthesis of pyrrolo[3,2-f]quinolin-7-ones

ΑU Majumdar, Krishna C.; Biswas, Paritosh; Jana, Gour H.

CS

Dep. Chem., Univ. Kalyani, Kalyani, 741 235, India Journal of Chemical Research, Synopses (1997), (9), 310-311 SO CODEN: JRPSDC; ISSN: 0308-2342

PΒ Royal Society of Chemistry

DTJournal

LA Enalish

CASREACT 128:3621 OS

AB A no. of derivs. of the hitherto unreported pyrrolo[3,2-f]quinolin-7-one tricyclic system have been synthesized from 6-nitroquinolone by successive redn., tosylation, methylation, detosylation, prop-2-ynylation, and treatment with m-chloroperoxybenzoic acid.

IT 198639-83-7P 198639-84-8P 198639-85-9P 198639-86-0P 198639-87-1P 198639-88-2P

198639-90-6P 198640-00-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(regioselective prepn. of pyrrolo[3,2-f]quinolin-7-ones)

RN 198639-83-7 CAPLUS

Benzoic acid, 3-chloro-, [6,7-dihydro-3,6-dimethyl-7-oxo-2-(phenoxymethyl)-CN 3H-pyrrolo[3,2-f]quinolin-1-yl]methyl ester (9CI) (CA INDEX NAME)

RN

198639-84-8 CAPLUS
Benzoic acid, 3-chloro-, [2-[(4-chlorophenoxy)methyl]-6,7-dihydro-3,6-dimethyl-7-oxo-3H-pyrrolo[3,2-f]quinolin-1-yl]methyl ester (9CI) (CA CNINDEX NAME)

$$\begin{array}{c} \text{C1} \\ \text{C} \\ \text{O} \\ \text{O} \\ \text{CH}_2 \\ \text{N} \\ \text{Me} \end{array}$$

RN 198639-85-9 CAPLUS

Benzoic acid, 3-chloro-, [6,7-dihydro-3,6-dimethyl-2-[(4-methylphenoxy)methyl]-7-oxo-3H-pyrrolo[3,2-f]quinolin-1-yl]methyl ester CN(9CI) (CA INDEX NAME)

RN

198639-86-0 CAPLUS
Benzoic acid, 3-chloro-, [2-[(2,4-dichlorophenoxy)methyl]-6,7-dihydro-3,6-CN dimethyl-7-oxo-3H-pyrrolo[3,2-f]quinolin-1-yl]methyl ester (9CI) (CA INDEX NAME)

$$C1$$
 $C=0$ 
 $CH_2$ 
 $N$ 
 $Me$ 

RN

198639-87-1 CAPLUS
Benzoic acid, 3-chloro-, [2-[(2,4-dimethylphenoxy)methyl]-6,7-dihydro-3,6-dimethyl-7-oxo-3H-pyrrolo[3,2-f]quinolin-1-yl]methyl ester (9CI) (CA CNINDEX NAME)

RN 198639-88-2 CAPLUS

CNBenzoic acid, 3-chloro-, [2-[(3,5-dimethylphenoxy)methyl]-6,7-dihydro-3,6dimethyl-7-oxo-3H-pyrrolo[3,2-f]quinolin-1-yl]methyl ester (9CI) (CA INDEX NAME)

$$C1$$
 $C=0$ 
 $CH_2$ 
 $CH_$ 

RN

198639-90-6 CAPLUS
Benzoic acid, 3-chloro-, [6,7-dihydro-3,6-dimethyl-2-[(4-nitrophenoxy)methyl]-7-oxo-3H-pyrrolo[3,2-f]quinolin-1-yl]methyl ester CN(9CI) (CA INDEX NAME)

$$C1$$
 $C=0$ 
 $CH_2$ 
 $N$ 
 $Me$ 

RN 198640-00-5 . CAPLUS CN

Benzoic acid, 3-chloro-, [2-[(acetyloxy)methyl]-6,7-dihydro-3,6-dimethyl-7oxo-3H-pyrrolo[3,2-f]quinolin-1-yl]methyl ester (9CI) (CA INDEX NAME)

198639-91-7P 198639-92-8P 198639-94-0P 198639-95-1P 198639-96-2P 198639-97-3P

198639-98-4P 198640-01-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(regioselective prepn. of pyrrolo[3,2-f]quinolin-7-ones)

RN198639-91-7 CAPLUS

 $7 H-Pyrrolo[3,2-f] \\ [quinolin-7-one, 3,6-dihydro-1-(methoxymethyl)-3,6-dihydro-1-(methoxymeth$ dimethyl-2-(phenoxymethyl)- (9CI) (CA INDEX NAME)

RN198639-92-8 CAPLUS

7H-Pyrrolo[3,2-f]quinolin-7-one, 2-[(4-chlorophenoxy)methyl]-3,6-dihydro-1-(methoxymethyl)-3,6-dimethyl- (9CI) (CA INDEX NAME) CN

RN 198639-94-0 CAPLUS

7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1-(methoxymethyl)-3,6-CN dimethyl-2-[(4-methylphenoxy)methyl]- (9CI) (CA INDEX NAME)

RN 198639-95-1 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-[(2,4-dichlorophenoxy)methyl]-3,6-dihydro-1-(methoxymethyl)-3,6-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{C1} & \text{MeO-CH}_2 \\ \text{O-CH}_2 & \text{N} \end{array}$$

RN 198639-96-2 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-[(2,4-dimethylphenoxy)methyl]-3,6-dihydro-1-(methoxymethyl)-3,6-dimethyl- (9CI) (CA INDEX NAME)

RN 198639-97-3 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-[(3,5-dimethylphenoxy)methyl]-3,6-dihydro-1-(methoxymethyl)-3,6-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{MeO-CH}_2 \\ \text{Me} \\ \text{Me} \\ \end{array}$$

RN 198639-98-4 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1-(methoxymethyl)-3,6-dimethyl-2-[(4-nitrophenoxy)methyl]- (9CI) (CA INDEX NAME)

RN 198640-01-6 CAPLUS

CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-[(acetyloxy)methyl]-3,6-dihydro-1-(methoxymethyl)-3,6-dimethyl- (9CI) (CA INDEX NAME)

#### RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4ANSWER 6 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1995:839604 CAPLUS
- 123:248961
- Dietary modulation of the carcinogenicity of the heterocyclic amines ΤI
- AU Weisburger, J. H.; Rivenson, A.; Kingston, D. G. I.; Wilkins, T. D.; Van Tassell, R. L.; Nagao, M.; Sugimura, T.; Hara, Y.
- CS American Health Foundation, Valhalla, NY, 10595, USA
- Proceedings of the International Symposium of the Princess Takamatsu Cancer Research Fund (1995), Volume Date 1992, 23rd(Heterocyclic Amines in Cooked Foods: Possible Human Carcinogens), 240-50 CODEN: PPTCBY
- Princeton Scientific PB
- DTJournal
- T.A English
- A series of studies explore modulation of the mutagenicity and AB carcinogenicity of typical HCAs like 2-amino-3-methylimidazo[4,5f]quinoline (IQ), and of 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP), through dietary fat, green or black tea, and tea polyphenols like epigallocatechin gallate (EGCG) and theaflavin gallate (TFG). Also examd. was the carcinogenicity of the bacterial metabolite of IQ, 7-oxo-IQ. and female F344 rats were fed diets with 75 ppm IQ for 12 mo, and contg. 5% or 20% corn oil. Complete necropsies after 15 mo (males), or 18 mo (females) were performed. Modification of the action of IQ and of PhIP in tests for bacterial mutagenicity (Ames test) or DNA repair in male rat hepatocytes (Williams test) by teas, EGCG or TFG was studied. Also compared was the activity of  $\overline{\text{IQ}}$  and of 7-oxo- $\overline{\text{IQ}}$  in the tests of Ames and of Williams, and their carcinogenicity in male F344 rats upon intrarectal infusion. A high fat diet was found to increase the carcinogenicity of low levels of IQ at several target organs. Multiple benign and malignant sebaceous skin tumors were noted in males but not in females. Green or black teas, EGCG, and TFG sharply reduced the mutagenicity of IQ and PhIP, and esp. lowered the activity of IQ and of PhIP in the Williams test. 7-Oxo-IQ was active only in the Ames test, but not in the Williams test. Also, it was not carcinogenic, confirming that chems. pos. in the Ames test but neg. in the Williams test are not likely carcinogens. The in vitro and in vivo effects of HCAs can be modified by dietary components such as fats or teas. 108043-88-5, 7-0xo-IQ
- TТ
  - RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (carcinogenicity of heterocyclic amines)
- RN 108043-88-5 CAPLUS
- CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

- ANSWER 7 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN T.4
- AN 1994:551041 CAPLUS
- DN
- Genotoxicity and carcinogenicity in rats and mice of 2-amino-3,6-dihydro-3methyl-7H-imidazolo[4,5-f]quinolin-7-one: an intestinal bacterial metabolite of 2-amino-3-methyl-3H-imidazo[4,5-f]quinoline
- AU Weisburger, John H.; Rivenson, Abraham; Reinhardt, Joel; Aliaga, Cesar; Braley, Joanne; Dolan, Lisa M.; Williams, Gary M.; Zang, Edith; Kingston, David G. I.; et al.
- CS Am. Health Found., Valhalla, NY, 10595, USA
- SO Journal of the National Cancer Institute (1994), 86(1), 25-30 CODEN: JNCIEQ; ISSN: 0027-8874
- DT
- LΑ English
- The authors confirmed that 2-amino-3,6-dihydro-3-methyl-7H-imidazolo[4,5-AB f]quinolin-7-one (7-OHIQ) is a direct-acting mutagen in the Ames test, with added S9 liver fraction giving higher mutagenicity. 7-OHIQ was neg. in the Williams test, whereas IQ was pos. 7-OHIQ did not induce colon cancer in rats, and in the newborn mouse test it produced only a low incidence of liver neoplasms. Apparently, 7-OHIQ is not genotoxic, for to be so classified it must be definitely pos. in both the Ames and Williams

tests; moreover, it is not carcinogenic, in marked contrast to IQ and NMU.

IT 108043-88-5

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (carcinogenicity and mutagenicity of)

RN 108043-88-5 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) INDEX NAME)

1.4 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

1993:648896 CAPLUS AN

DN 119:248896

ΤI Influence of diet on the conversion of 2-amino-3-methyl-3Himidazo[4,5f]quinoline (IQ) to the 7-keto derivative (7-OHIQ)

AU Rumney, C. J.; Rowland, I. R.

CS

BIBRA Toxicol. Int., Carshalton/Surrey, SM5 4DS, UK Special Publication - Royal Society of Chemistry (1993), 123(Food and SO Cancer Prevention: Chemical and Biological Aspects), 70-4 CODEN: SROCDO; ISSN: 0260-6291

DTJournal

LΑ English

AB The effect of dietary fats, fiber, and transgalactosylated oligosaccharides (TOS) on the conversion of a carcinogen IQ to a direct-acting genotoxin, 7-hydroxy-2-amino-3,6-dihydro-3-methyl-3H-imidazo[4,5-f]quinoline-7-one (7-OHIQ), by human gut bacteria was studied on rats adapted to human gut bacteria. After 18-h incubation of 14C-labeled IQ with cecal content from rats fed a diet contg. 1% fat or 25% fat as beef drippings, about 95% IQ was converted into 7-OHIQ, whereas this conversion amounted 65% only when rats were fed a diet contg 25% olive oil. No significant differences in the rate of conversion was found during 24-h incubation of cecal contents from rats fed a dietary fiber-free diet in comparison with diets contg. dietary fiber from sugar beet, wheat bran, and oats. In rats supplemented with TOS, the conversion of IQ to 7-OHIQ was restricted to 77% in comparison with 93% in the cecal content from unsupplemented control rats.

IT 108043-88-5

RL: BIOL (Biological study)

(IQ conversion to, by cecal microflora, dietary factors affecting, carcinogenicity and genotoxicity in relation to)

RN 108043-88-5 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

ANSWER 9 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:648895 CAPLUS

DN 119:248895

TI Influence of dietary fat on metabolism of 2-amino-3-methyl-3H-imidazo[4,5f]quinoline (IQ)

ΑU Rumney, C. J.; Rowland, I. R.; O'Neill, I. K. CS

BIBRA Toxicol. Int., Carshalton/Surrey, SM5 4DS, UK Special Publication - Royal Society of Chemistry (1993), 123(Food and SO Cancer Prevention: Chemical and Biological Aspects), 65-9 CODEN: SROCDO; ISSN: 0260-6291

DT Journal

LA English

The potential effect of low- vs. high-fat diets on the metab. of IQ was studied on human flora-assocd. rats fed human diets. The risk assocd.

with ingestion of a pyrolysis carcinogen, such as IQ, may be reduced by a decrease in dietary fat level. Thus, on the low-fat diet as compared with the high-fat diet, the in vitro hepatic activation of IQ was 230 vs. 530 revertants per plate; the conversion of IQ to 7-hydroxy-IQ by cecal content during 6-h incubation was 10 vs. 30%; and the activity of .beta.-glucuronidase in the cecal content was 10 vs. 50 .mu.mol/h/q. 108043-88-5

RL: FORM (Formation, nonpreparative)

(formation of, in IQ metab. in cecal content, dietary fat level effect on, carcinogenicity in relation to)

108043-88-5 CAPLUS

7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

IT

RN

CN

T.4 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:556798 CAPLUS

DN 119:156798

Conversion of IQ to 7-OHIQ by gut microflora TI

Rumney, Corinne J.; Rowland, Ian R.; O'Neill, Ian K. AU CS BIBRA Toxicol. Int., Carshalton/Surrey, SM5 4DS, UK

Nutrition and Cancer (1993), 19(1), 67-76

CODEN: NUCADQ; ISSN: 0163-5581

DТ Journal

SO

AB

English T.A

> The rates of conversion of 2-amino-3-methyl-3H-imidazo[4,5-f]quinoline (IQ) to its reportedly mutagenic 7-keto deriv. (7-OHIQ) by intestinal bacteria from humans, mice, and rats were compared. IQ was metabolized faster by cecal contents from rats or mice than by human fecal samples (113 and 87 .mu.mol 7-OHIQ formed/h-g cecal contents, resp., vs. 12.3 .mu.mol/h-g feces). Cecal contents from germ-free rats colonized with human fecal bacteria [human flora-assocd. (HFA) rats] converted IQ to 7-OHIQ at rates generally lower than contents from rats colonized with their native flora. Diet had a marked effect on IQ metab. by HFA rat cecal contents. The rate of IQ conversion to 7-OHIQ was increased in rats fed on a diet high in beef dripping compared with that in rats fed a low-fat control diet. A diet high in olive oil, however, did not produce an increase in the IQ conversion rate. Addn. of fiber to a purified diet increased the rate of IQ metab. in the following order: sugar beet fiber > wheat bran > oat bran fiber > fiber-free diet. In a further study, HFA rats were fed human diets altered independently in their fat, fiber (wheat bran), and beef contents. The high-fiber diet produced the greatest increase in IQ conversion rate, followed by the high-fat diet. The diet with a high beef content and the control diet (low levels of all 3 macrocomponents) produced similarly low rates of IQ conversion. Material from incubations of IQ with HFA rat cecal contents, assumed to be 7-OHIO on the basis of chromatog. behavior, was confirmed to be directly mutagenic, producing .apprx.800 His+ revertants/.mu.g with S. typhimurium TA 98

IT 108043-88-5

RL: FORM (Formation, nonpreparative)

(formation of, from IQ by intestinal microorganisms, diet effect on)

RN 108043-88-5 CAPLUS

CN7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

AN 1993:516159 CAPLUS DN 119:116159 Effect of diet on glucuronide hydrolysis and the conversion of IQ to ΤI 7-OHIQ by caecal contents of human flora associated (HFA) rats ΑU Rumney, Corinne; Rowland, Ian; Shah, Atul; Ellul, Ann; O'Neill, Ian BIBRA, Carshalton/Surrey, SM5 4DS, UK CS Mikrooekologie und Therapie (1992), 20(Exp. Klin. Gnotobiol.), 107-10 SO CODEN: MITHE4; ISSN: 0720-0536 Journal DТ English LΑ High-fat and high-fiber diets gave greatest conversion of AB 2-amino-3-methyl-3H-imidazo[4,5-f]quinoline(IQ) to 7-hydroxy-2-amino-3,6dihydro-3-methyl-7H-imidazo[4,5-f]quinoline-7-one (7-OHIQ) in rats with human cecal flora. Germ-free rats showed no conversion. The high-fat group had highest .beta.-glucuronidase activity, followed by the high-fiber and then high-beef and low-fiber, fat, beef groups. IT 108043-88-5 RL: FORM (Formation, nonpreparative) (formation of, by cecal bacteria, diet compn. effect on) RN 108043-88-5 CAPLUS 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA CN INDEX NAME)

ANSWER 12 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN ΑN

1993:249678 CAPLUS

DN 118:249678

TΙ Prostaglandin H synthase-dependent formation of the direct-acting mutagen 2-nitro-3-methylimidazo[4,5-f]quinoline (nitro-IQ) from IQ

AU Morrison, Lesley D.; Eling, Thomas E.; Josephy, P. David

Guelph-Waterloo Cent. Grad. Work Chem., Univ. Guelph, Guelph, ON, N1G 2W1, Can.

SO Mutation Research (1993), 302(1), 45-52

CODEN: MUREAV; ISSN: 0027-5107

DT Journal

LA English

The mutagenic effects of IQ following activation by ram seminal vesicle microsomes (RSVM, a source of prostaglandin H synthase, PHS) were studied in Salmonella typhimurium tester strains possessing elevated levels of acetyl-CoA: arylamine N-acetyltransferase (NAT). The metabolites formed by RSVM were extd. and fractionated by HPLC. One isolable product accounted for most of the direct-acting mutagenicity obsd. in the exts. The metabolite was identified as nitro-IQ.

IT 108043-88-5

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (mutagenicity of)

RN 108043-88-5 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

ANSWER 13 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:75141 CAPLUS

DN 118:75141

Entrapment by magnetic microcapsules of the protein pyrolysates IQ, PhIP and Glu-P-1, and alteration of IQ metabolite exposure within the rat gastrointestinal tract by risk-modulating components of the human diet ΑIJ O'Neill, I.; Ohgaki, H.; Ellul, A.; Turesky, R. J.

Int. Agency Res. Cancer, Lyon, 69372, Fr. CS Carcinogenesis (1992), 13(12), 2353-9 SO CODEN: CRNGDP; ISSN: 0143-3334

DТ Journal English LΑ

AB

The entrapment of heterocyclic arom. amine gastrointestinal carcinogens (HAAs), by retrievable semipermeable magnetic polyethyleneimine (PEI) microcapsules was investigated in vitro and in vivo as an approach for human biomonitoring. The 14C-labeled IQ, PhIP and Glu-P-1 are adsorbed to PEI microcapsules in vitro and can be desorbed by treatment with methanolic ammonia. Binding of HAAs to PEI microcapsules contq. copper phthalocyanine, a moiety which reversibly binds chems. with arom. planar structures, was 2- to 4-fold higher than with unmodified PEI microcapsules. PEI microcapsules also acted as a nucleophile and trapped the proximate carcinogenic metabolite of IQ, N-hydroxy-IQ. The entrapment of 14C-labeled IQ and PhIP by microcapsules was investigated in vivo in male F344 rats fed a conventional chow diet or a human diet with varying amts. of fat and beef intake typically consumed in the UK. Animals were adapted to human diets which were either high (H) or low (L) in fat (F), beef protein (B) and dietary fiber non-starch polysaccharide (NSP). Microcapsule entrapment of IQ and metabolites was 0.5-2.0% of the dose and 4-fold higher in rats consuming a HF/HB/LNSP than those consuming a LF/LB/HNSP diet, these being resp. putative high- and low-risk-assocd. diets. In the HF/HB/LNSP diet group, a higher amt. of IQ metabolites were detected in the microcapsules; a lower proportion of covalently bound metabolites could be removed by acid hydrolysis. Urinary excretion was 2-fold greater and anal. of the urinary metabolites showed there to be lower sulfotransferase activity than in the LF/LB/HNSP group. The amt. of 14C-labeled PhIP entrapped by PEI microcapsules was 1.5% of the dose in rodents fed a LF/HB/LNSP human diet and binding was 7-fold higher than in rodents fed a semi-purified diet. These results demonstrate that microcapsules can entrap IQ and PhIP and their metabolites within the GI tract of rodents. The amts. entrapped by microcapsules in the rodent model suggest that this approach may be feasible for human biomonitoring of HAAs and for non-invasively studying dietary modulations of carcinogen exposure within a potential HAA target organ at high risk from as-yet unidentified causes.

IT 108043-88-5

RN

CN

RL: BIOL (Biological study)

(IQ metabolite, factors affecting metab. from magnetic microcapsules in relation to)

108043-88-5 CAPLUS

7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

ANSWER 14 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN L4AN

1992:632345 CAPLUS

DN

Electron impact and fast atom bombardment mass spectrometric analysis of the food-borne carcinogens 2-amino-3-methylimidazo [4,5-f] quinoline, 2-amino-3,8-dimethylimidazo [4,5-f] quinoxaline and their metabolites

Fay, Laurent B.; Turesky, Robert J.

Nestle Res. Cent., Nestec Ltd., Lausanne, 1000, Switz. CS

Biological Mass Spectrometry (1992), 21(9), 463-9

CODEN: BIMSEH; ISSN: 1052-9306

DT Journal

LA English

ΑU

Electron impact (EI) and fast atom bombardment (FAB) mass spectrometry were used to characterize the hetercyclic arom. amines, 2-amino-3methylimidazo[4,5-f]quinoline and 2-amino-3,8-dimethylimidazo[4,5f]quinoxaline and their metabolites. The carcinogenic N2-hydroxy metabolites and several non-conjugated detoxification products were analyzed directly by EI mass spectrometry, while several polar sulfate and .beta.-glucuronic acid conjugates were analyzed by FAB mass spectrometry. Anal. of .beta.-glucuronic acid conjugates was also achieved by EI mass spectrometry following silylation.

IT 108043-88-5 144240-96-0

RL: ANT (Analyte); ANST (Analytical study)

INDEX NAME)

₽N

CN

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ΤI

ΑU

CS

so

144240-96-0 CAPLUS

108043-88-5 CAPLUS

7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-1,6-dihydro- (9CI) (CA INDEX

7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA

ANSWER 15 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

(detn. of, in urine by mass spectrometry)

1992:628171 CAPLUS

DN 117:228171

Metabolism of the food mutagen 2-amino-3-methylimidazo[4,5-f]quinoline in

nonhuman primates undergoing carcinogen bioassay

Snyderwine, Elizabeth G.; Welti, Dieter H.; Fay, Laurent B.; Wuerzner,

Hans Peter; Turesky, Robert J.

Div. Cancer Etiol., Natl. Cancer Inst., Bethesda, MD, 20892, USA

Chemical Research in Toxicology (1992), 5(6), 843-51

CODEN: CRTOEC; ISSN: 0893-228X

DT Journal

LΑ English GI

NH2 NMe

Ι

AB The metab. and disposition of the procarcinogen IQ (I) were investigated in monkeys undergoing carcinogen bioassay and in monkeys given an acute dose of IQ. Anal. of urine, feces, and bile revealed that IQ was extensively metabolized. Metabolites resulted from cytochrome P 450-mediated ring oxidn. at the C-5 position or N-demethylation. metabolites could be further transformed by conjugation to sulfate or .beta.-glucuronic acid. Glucuronidation and sulfamate formation at the exocyclic amine group were other major routes of metab. Enteric bacteria also contributed to IQ biotransformation by forming the 7-oxo deriv. of IQ and N-demethyl-IQ. The metastable N2-glucuronide conjugate of the carcinogenic metabolite, 2-(hydroxyamino)-3-methylimidazo[4,5-f]quinoline, was found in urine. Thus, metabolic activation through cytochrome P 450-mediated N-oxidn. occurs in vivo and glucuronidation is a means of transport of the carcinogenic metabolite to extrahepatic tissues. IT

108043-88-5 144240-96-0

RL: BIOL (Biological study)

(as aminomethylimidazoquinoline metabolite, in monkey)

108043-88-5 CAPLUS

7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI)

INDEX NAME)

RN

CN

RN

CN

AU

CS

so

GΙ

ΑB

IT

144240-96-0 CAPLUS

7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-1,6-dihydro- (9CI) (CA INDEX

ANSWER 16 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

L4ΑN 1990:440556 CAPLUS

DN 113:40556

ΤI Synthesis and biological evaluation of methylated derivatives of the cooked food mutagen metabolite 2-amino-3,6-dihydro-3-methyl-7H-imidazo[4,5f]quinolin-7-one (7-OH-IQ)

Bashir, Mohammad; Kingston, David G. I.; Van Tassell, Roger L.; Wilkins, Tracy D.

Dep. Chem., Virginia Polytech. Inst. and State Univ., Blacksburg, VA, 24061-0212, USA

Heterocycles (1989), 29(10), 1915-22 CODEN: HTCYAM; ISSN: 0385-5414

DT Journal LA English

CASREACT 113:40556

os

 $NH_2$ NH<sub>2</sub> MeN MeN OMe III

The major anaerobic metabolite of the potent cooked food mutagenic carcinogen IQ is the oxidized product I (R = H) (II), which is itself a powerful direct-acting mutagen. The O-Me and N-Me derivs. III and I (R = Me) of II have been prepd. to det. whether the tautomeric form of II plays any role in its bioactivity. Both I (R = Me) and III show comparable mutagenicity when tested directly against the T98 strain of Salmonella typhimurium, indicating that the quinoline structure does not play a major role in the mutagenicity of II. Neither II nor the methylated derivs. cleaved DNA in the presence of metal cations. 108043-88-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (metabolites of, prepn. and mutagenicity of)

108043-88-5 CAPLUS

RN CN7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

RN CN

CN

L4 AN

DN

TI

AU CS

so

DT

LA

AB

IT 128006-28-0P 128006-29-1P

RL: ADV (Adverse effect, including toxicity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and mutagenicity of)

128006-28-0 CAPLUS

7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3,6-dimethyl- (9CI) (CA INDEX NAME)

RN 128006-29-1 CAPLUS

3H-Imidazo[4,5-f]quinolin-2-amine, 7-methoxy-3-methyl- (9CI) (CA INDEX NAME)

ANSWER 17 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

1989:626991 CAPLUS

111:226991

Metabolism of 2-amino-3-methylimidazo[4,5-f]quinoline in the male rat

Inamasu, T.; Luks, H.; Vavrek, M. T.; Weisburger, J. H. American Health Found., Valhalla, NY, 10595, USA

Food and Chemical Toxicology (1989), 27(6), 369-76

CODEN: FCTOD7; ISSN: 0278-6915

Journal

English

Adult male rats were administered [2-14C]IQ or [5-3H]IQ by oral gavage at dose levels of 20 or 40 mg/kg. Rats were also given [2-14C] IQ in the diet at a dose level of 300 ppm for 2 days and after administration of unlabeled IQ (300 ppm) in the diet for approx. 6.5 wk for an addnl. 2 days. In the initial 48 h following oral administration of 20 or 40 mg [2-14C] IQ/kg, 40-50% radioactivity was recovered in the urine, and 30-38% radioactivity was recovered in the feces. In the initial 72 h following consumption of [2-14C]IQ (300 ppm) in the diet about 26% radioactivity was recovered in the urine and about 61% radioactivity was recovered in the feces. Following cannulation of the bile ducts, rats administered a single dose of [2-14C]IQ (40 mg/kg) by oral gavage excreted about 15% of the administered dose in the bile over a period of 2 days. Urine from rats given [2-14C]IQ contained three main polar metabolites that included a glucuronide, a sulfate ester and IQ sulfamate, and a no. of less polar metabolites that included IQ, 2-acetylamino-3-methylimidazo[4,5f]quinoline, 2-aminoimidazo[4,5-f]quinoline, and 2-amino-3,6-dihydro-3methyl-7H-imidazo[4,5-f]quinoline-7-one (7-OH-IQ). Administration of [2-14C]IQ by oral gavage or in the diet gave the same metabolites, but in different amts. In the feces of rats given [2-14C] by oral gavage, IQ sulfamate was the major metabolite in the polar fraction. Nonpolar metabolites similar to those found in the urine were also present, but in different amts. A major, nonpolar fecal metabolite, 7-OH-IQ was probably formed as a result of the activity of the intestinal bacterial flora. In rats given a single gavage dose of [2-14C] IQ, excretion of metabolites was higher in the urine and lower in the feces compared with that in animals

fed [2-14C]IQ in the diet. One polar metabolite present in the urine, IQ-sulfamate (39%), was found at considerably higher levels in rats dosed orally with IQ compared with those fed IQ (less than 6%). Thus, IQ is extensively metabolized to give a no. of polar and nonpolar metabolites, the amts. of which depend, in part, on the mode of dosing.

IT 108043-88-5

RL: BIOL (Biological study)

(as IQ metabolite, after exposure)

RN 108043-88-5 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:550316 CAPLUS

DN 111:150316

TI Isolation, structure elucidation, and synthesis of the major anaerobic bacterial metabolite of the dietary carcinogen 2-amino-3,4-dimethyl-3H-imidazo[4,5-f]quinoline (MeIQ)

AU Bashir, Mohammad; Kingston, David G. I.; Carman, Robert J.; Van Tassell, Roger L.; Wilkins, Tracy D.
 CS Dep. Chem., Virginia Polytech. Inst. and State Univ., Blacksburg, VA.

Dep. Chem., Virginia Polytech. Inst. and State Univ., Blacksburg, VA, 24061-0212, USA

SO Heterocycles (1989), 29(6), 1127-35

CODEN: HTCYAM; ISSN: 0385-5414

DT Journal

LA English

Me

AB Incubation of the heterocyclic cooked food mutagen MeIQ (I) with mixed human fecal microflora under anaerobic conditions yielded II as the major detectable metabolite. II was synthesized in 6 steps from 6-bromo-7-methylquinoline.

IT 122759-88-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and formation as food mutagen metabolite in anaerobic bacteria of)

RN 122759-88-0 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3,4-dimethyl- (9CI) (CA INDEX NAME)

IT 122759-99-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 122759-99-3 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one-2-14C, 2-amino-3,6-dihydro-3,4-dimethyl-(9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1989:90347 CAPLUS

DN 110:90347

TI Conversion of IQ, a dietary pyrolysis carcinogen to a direct-acting mutagen by normal intestinal bacteria of humans

AU Carman, R. J.; Van Tassell, R. L.; Kingston, D. G. I.

CS Dep. Anaerobic Microbiol., Virginia Polytech. Inst. and State Univ., Blacksburg, VA, 24061, USA

Mutation Research (1988), 206(3), 335-42

CODEN: MUREAV; ISSN: 0027-5107

DT Journal

LA English

Mixed and pure cultures of human intestinal anaerobes, notably Eubacterium species, metabolized IQ to 2-amino-3,6-dihydro-3-methyl-7H-imidazo[4,5-f]quinoline-7-one (HOIQ). Unlike IQ, both the synthetic and bacterially produced HOIQ were direct-acting mutagens, i.e. active without microsomal activation. This new direct-acting mutagen, from the bacterial metab. of a dietary pyrolysis carcinogen, raises new concerns about the possible role of this class of genotoxins in the etiol. of human cancer.

IT 108043-88-5

RL: BIOL (Biological study)

(IQ metab. to, by fecal bacteria and intestinal bacteria of humans, mutagenicity in relation to)

RN 108043-88-5 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1988:422737 CAPLUS

DN 109:22737

TI Biological formation and chemical synthesis of 2-amino-3,6-dihydro-3-methyl-7H-imidazolo[4,5-f]quinolin-7-one, the major metabolite of the dietary carcinogen 2-amino-3-methyl-3H-imidazolo[4,5-f]quinoline (IQ) by normal intestinal bacteria

AU Bashir, Mohammad; Kingston, David G. I.; Carman, Robert J.; Van Tassell, Roger L.; Wilkins, Tracy D.

CS Dep. Chem., Virginia Polytech. Inst. and State Univ., Blacksburg, VA, 24061, USA

SO Heterocycles (1987), 26(11), 2877-86 CODEN: HTCYAM; ISSN: 0385-5414

DT Journal

LA English

OS CASREACT 109:22737

GI

AB 2-Amino-3,6-dihydro-3-methyl-7H-imidazo[4,5-f]quinolin-7-one (I) has been synthesized from 6-bromo-5-nitroquinoline in 7 steps. Biol. formation of I from IQ involves the addn. of H2O from the medium, followed by oxidn.

IT 108043-88-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (microbial formation from IQ and prepn. of)

RN 108043-88-5 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

RN 115071-63-1 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 3,6-dihydro-2,3-dimethyl- (9CI) (CA INDEX NAME)

RN 115091-26-4 CAPLUS

## • HBr

L4 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1987:190840 CAPLUS

DN 106:190840

TI Anaerobic metabolism of 2-amino-3-methyl-3H-imidazo[4,5-f]quinoline (IQ) by human fecal flora

AU Bashir, M.; Kingston, D. G. I.; Carman, R. J.; Van Tassell, R. L.; Wilkins, T. D.

CS Virginia Polytech. Inst. and State Univ., Blacksburg, VA, 24061, USA

SO Mutation Research (1987), 190(3), 187-90

CODEN: MUREAV; ISSN: 0027-5107

DT Journal English LA GΙ

AΒ Incubation of the heterocyclic cooked food mutagen IQ (I) [76180-96-6] with mixed human fecal microflora under anaerobic conditions yielded 2-amino-3,6-dihydro-3-methyl-7H-imidazo[4,5-f]quinolin-7-one (II) [ 108043-88-5] as the major detectable metabolite.

IT 108043-88-5

RL: BIOL (Biological study)

(as IQ metabolite, after anaerobic metab. by human fecal flora)

RN 108043-88-5 CAPLUS

CN 7H-Imidazo[4,5-f]quinolin-7-one, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

IT 108026-25-1P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 108026-25-1 CAPLUS

CN7H-Imidazo[4,5-f]quinolin-7-one-2-14C, 2-amino-3,6-dihydro-3-methyl- (9CI) (CA INDEX NAME)

ANSWER 22 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN L4

AN 1983:438395 CAPLUS

DN99:38395

Synthesis of pyrroloquinolones TI

ΑU Yamashkin, S. A.; Yudin, L. G.; Kost, A. N.

CS Mosk. Gos. Univ., Moscow, USSR

SO Khimiya Geterotsiklicheskikh Soedinenii (1983), (4), 493-7

CODEN: KGSSAQ; ISSN: 0453-8234

DT Journal

LΑ Russian

OS CASREACT 99:38395

 $_{\mathtt{GI}}$ 

AB Intramol. cyclocondensation of I (R = Me, H; R1 = EtO2CCH:CMeNH) by refluxing in biphenyl gave 89 and 95% pyrroloquinolines II. Similarly, refluxing I (R = Me, R1 = MeCOCH2CONH) in F3CCO2H gave a mixt. contg. III and IV. Refluxing I (R = Me, R1 = EtO2CCH:CMeNH in the 6 position) with biphenyl gave 90% V.

IT 86269-88-7P 86269-91-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 86269-88-7 CAPLUS RN

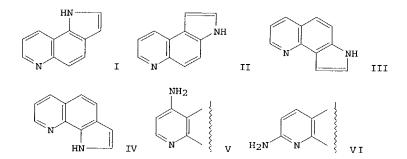
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1,2,9-trimethyl- (9CI) (CA INDEX NAME)

RN 86269-91-2 CAPLUS

CN7H-Pyrrolo[2,3-f]quinolin-7-one, 1,6-dihydro-2,3,9-trimethyl- (9CI) (CA INDEX NAME)

- L4ANSWER 23 OF 23 CAPLUS COPYRIGHT 2004 ACS on STN
- ΑN 1982:6616 CAPLUS
- DN 96:6616
- Chichibabin reaction in a series of angular pyrroloquinolines TI
- ΑŲ Akhvlediani, R. N.; Shabunova, V. P.; Morozova, I. A.; Volodina, T. A.; Suvorov, N. N.
- CS
- Khim.-Tekhnol. Inst., Moscow, USSR Zhurnal Organicheskoi Khimii (1981), 17(7), 1542-6 SO CODEN: ZORKAE; ISSN: 0514-7492
- DT Journal
- LΑ Russian
- os CASREACT 96:6616

GI



AB The angular pyrrologuinolines I, II, III and IV, underwent amination with NaHN2 in xylene at the .alpha. and .gamma. positions to give mixts. of amino derivs. V and VI.

IT 80077-05-0P 80104-38-7P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 80077-05-0 CAPLUS

CN 3H-Pyrrolo[3,2-f]quinolin-7-amine (9CI) (CA INDEX NAME)

RN 80104-38-7 CAPLUS CN 1H-Pyrrolo[2,3-f]quinolin-7-amine (9CI) (CA INDEX NAME)